

Bidirectional unit (BDU) transition process



Fact Sheet

This fact sheet provides background information and guidance on the process to transition battery energy storage systems registered before 3 June 2024 from two to one dispatchable unit and commence bidirectional unit operations.

Context

The rule on <u>integrating energy storage systems</u> (**IESS**) introduces the scheduled bidirectional unit (**BDU**). The BDU classification will enable storage units to submit a single bid and to receive a single dispatch instruction. Previously, storage, including battery energy storage systems (**BESS**), had participated as generation and load dispatchable units (**DUID**).

All grid-scale BESS registered prior to 3 June 2024 must transition to the BDU classification by 3 March 2025. This fact sheet summarises the arrangements for BESS to transition to the BDU classification (BDU cutover).

Key documents

The key documents which relate to this Fact Sheet are as follows.

DOCUMENT	AUDIENCE	PURPOSE
IESS Bidirectional Unit (BDU) transition and cutover plan (Plan)	BESS providers Metering Service Providers Software vendors	This document details the BDU and NMI cutover processes. This document details the key concepts in this Fact Sheet.
BDU bid validation fact sheet	BESS providers Software vendors	This document outlines the BDU energy bid price band validation, which requires that prices increase monotonically for bid price bands with available capacity.
IESS participant toolbox		This document lists the Frequency Asked Questions (FAQs)



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Indicative BDU cutover timeline

The indicative process timeline for a BDU cutover is as follows.



The cutover process involves the following four phases, each with defined activities for participants and/or AEMO to complete:

- 1. Prerequisites: The preparatory activities required before the cutover process can commence.
- 2. <u>Pre-Cutover</u>: The activities required over the period prior to the Cutover Day, primarily to allow visibility of the 1-DUID BDU in pre-dispatch.
- 3. <u>Cutover Day</u>: The day when BESS bidding and dispatch from the 2-DUID arrangement ceases and 1-DUID BDU bidding and dispatch commences.
- 4. <u>Post-Cutover</u>: The activities required to complete the cutover process and cease operation of the 2-DUID arrangement.

The process involves parallel visibility of both the 2-DUID arrangement and the 1-DUID BDU (in respect of each BESS) in AEMO's production systems for a period of several days. Participants will submit bids for the existing 2-DUID arrangement for dispatch intervals throughout the post-cutover period. In advance of the Cutover Day, participants will also submit bids on the new 1-DUID BDU for dispatch intervals that occur both before and after the Cutover Day and time.

Participants will be responsible for submission of bids that reflect:



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- zero PASA availability on the new 1-DUID BDU until the cutover time; and
- zero PASA availability on the existing 2-DUID arrangement from and after the cutover time.

High level visual of expected bidding behaviour

Pre-cutover		Cutover da	ay (Day 0)	Post-cutover	
Active DUIDs	Day -8 Deadline for BESS participant to submit bids on load/gen DUIDs (non-0 until cutover; 0 bids from cutover for 7 days after cutover)	Cutover	interval		
Load DUID non-zero availability Gen DUID non-zero availability BDU DUID non-zero availability					
BDU DUID zero availability		\geq	Load DUI Gen DUII	D zero availability D zero availability	
Day -12 BDU DUID effective in prod	Day -8 Deadline for BESS participant to submit bids on BDU DUID (0 to cutover; non-0 from cutover))		Day +7 Load/gen DUIDs bids end period.	
Inactive DUIDs		Days reflect all calen	dar day types, i.e., not business da	ays.	

The term "non-zero" availability represents actual availability, e.g., actual availability against the 1-DUID BDU post-cutover may be zero MW, however, non-zero is used to simplify the depiction of the switch from the 2-DUID model to the 1-DUID BDU model.

Participants will be required to demonstrate their capability to meet the above bidding requirements via preproduction, in the lead up to their production cutover. Such "capability demonstration" is included in the preproduction cutover activities. Pre-production BDU cutover must also take place at least 14 calendar days prior to production BDU cutover (the "Bidding Instruction" and "Pre-production cutover" sections in the Plan set out more information).

A BESS which participated in a pre-production cutover during market trial requires such a capability demonstration.

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BDU high-level checklist

The following high-level checklist provides guidance on the key activities for BESS providers to complete in the lead up to, on, and after the Cutover Day. However, this checklist does not cover every activity in the Plan.

PERIOD	WHAT	WHEN
Prerequisites	Schedule production cutover date and times with AEMO + vendor	ASAP – AEMO to provide times by Fri 21 June 2024
	Externally, contact your MSPs + internally, contact traders and other people involved in the BDU cutover to inform of cutover dates and expected changes	ASAP
	Submit IRP transition application form	By 35 days before prod cutover
	Schedule pre-production cutover date and time with AEMO + vendor	By 35 days before prod cutover (or min. 3 weeks' notice)
	BESS registration change freeze period starts before pre-cutover	3 weeks before prod cutover date - 3 weeks after prod cutover
Pre-production	Cutover to BDU in pre-production	Between 3 July (3 weeks from now) and 14 days before prod cutover
	Provide capability demonstration in pre-production	Between cutover in pre-prod
Pre-cutover	Provide cutover contacts to AEMO for cutover day real-time activities	By Day -14
	Notify AEMO when auto-bidding software to switch on for BDU	By Day -8
	Remove any future auto-bids on load/gen DUIDs for post-cutover period	By Day -8
	Submit bids adhering to bid submission requirements for BDU cutover when BDU available in prod	By Day -8
Cutover Day	Cutover to BDU in production	Day 0
	Check dispatch instructions received via market systems switched over to BDU from first BDU DUID interval	Day 0

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Where can I find more information?

AEMC IESS determination and rule	https://www.aemc.gov.au/rule-changes/integrating-energy- storage-systems-nem
AEMC Implementing IESS determination and rule	https://www.aemc.gov.au/rule-changes/implementing- integrated-energy-storage-systems
AEMO IESS participant toolbox	https://aemo.com.au/initiatives/major-programs/integrating- energy-storage-systems-project/integrating-energy-storage- systems-faqs
AEMO IT change and release management	https://aemo.com.au/energy-systems/market-it-systems/it- change-and-release-management

For any further enquiries, please contact AEMO's Information and Support Hub by either:

- emailing supporthub@aemo.com.au
- calling 1300 236 600

This Fact Sheet is only a summary of the BDU transition arrangements. Applicants are responsible for ensuring they understand the relevant provisions of the National Electricity Rules and other applicable instruments, which prevail in the case of any inconsistency with this Fact Sheet.